

CONSUMER-ADMINISTERED BLOOD PRESSURE MEASUREMENT

Position Statement of the National High Blood Pressure Coordinating Committee

December, 1977

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Background

An increasing number and variety of blood pressure measurement devices have become available to consumers in recent years. Both manual and automated devices for home use are sold in pharmacies, medical supply stores and retail department stores, and have been reported to be selling quickly. In addition, at least two manufacturers of automated, coin operated equipment are actively marketing these devices for use in banks, shopping centers and other public places.

It is necessary to distinguish between home blood pressure measurement by a patient under medical supervision and consumer determination of blood pressure using unsupervised coin-operated or manual devices. When suitable training and review are provided to the patient, home blood pressure measurement can be most helpful in ongoing management of hypertension. However, not all patients are suited to home blood pressure measurement. The decision about which patients will benefit should be made by a health professional, preferably the physician. In any case, it is important that the patient or consumer understand the reading and the proper action to be taken, as well as be assured of accuracy and reliability of the equipment.

Potential Benefits

The availability of devices permitting self-measurement of blood pressure by patients and consumers, outside the usual health care setting, can contribute in a number of ways to improved control of this major public health problem:

- 1) Promotion and accessibility of such devices can reinforce the importance of blood pressure to health and its measurement as a part of regular health care.
- 2) For some patients on antihypertensive therapy, readily available blood pressure measurement can help motivate or reinforce maintenance of the regimen.
- 3) Home blood pressure measurement can encourage the involvement of the patient and his or her family in therapy.
- 4) Multiple measurements outside the doctor's office can assist in treatment decisions for borderline or labile hypertensive patients and can aid the physician in evaluating efficacy of prescribed drugs or other therapy for definite hypertension.

Areas of Concern

The potential benefits of patient and consumer-administered blood pressure measurements must be balanced against a number of concerns relating to inadequate training in measurement technique, inaccurate equipment, and inadequate information about the meaning of blood pressure readings.

- 1) Proper training in measurement technique and equipment maintenance is essential for anyone measuring blood pressure.
- 2) Both manual and automatic equipment must be properly maintained and accuracy and reliability assured periodically.
- 3) The availability and presence of blood pressure devices in supermarkets, drugstores, airports and other public places may encourage patients and consumers to become overly conscious of their blood pressure, misinterpreting or over-reacting to single readings.
- 4) Blood pressure readings must be interpreted by a qualified medical professional. Self-diagnosis is hazardous. The detection of an elevated blood pressure on a single, or even on several occasions, does not establish a diagnosis of hypertension. Self adjustment of medication on the basis of such readings, without medical supervision, may also be a real danger.
- 5) A blood pressure reading, without access to an explanation of the significance, accuracy and limitations of the reading, is a questionable service. No self-administered device is a substitute for evaluation by a physician.

Recommendations

With proper safeguards, it is possible for the benefits of widespread availability of blood pressure measurement to be achieved while the hazards of misinterpretation and misuse are minimized. The High Blood Pressure Coordinating Committee recommends that

- 1) Proper training in measurement technique and in equipment maintenance should be provided for those measuring blood pressure at home by the health care provider recommending home measurement. Evaluation of accuracy of measurement and equipment should be repeated regularly and frequently. For those measuring blood pressure without medical supervision, training must be provided through the manufacturer or retailer using literature or, preferably, referral to a qualified source.
- 2) Standards for performance, use, labelling and maintenance of blood pressure measurement devices should be developed by the Food and Drug Administration under the authority of PL 94-295, the Medical Devices Amendments of 1976.
- 3) Adequate information about the meaning of blood pressure readings should be provided to persons using any self-administered device. An adequate supply of informational material should be kept on hand where automated coin-operated devices are in use and incorporated into packaging of consumer-purchased devices. Such information should clearly indicate the appropriate course of action and qualified sources of requisite care.